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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/786,043

02/26/2004

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EXAMINER

PECHE, JORGE O

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/786,043	Applicant(s) KLOTZBUECHER ET AL.	
	Examiner JORGE O. PECHE	Art Unit 3664	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02/26/2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 26 February 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim **1** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "the degree of actuator" in claim **1** is a relative term, which renders the claim indefinite. The term "the degree of actuator" is not defined by the claim **1**, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Applicant should clearly disclose how the two degree of actuations are defined by different spring constants; how the accelerator pedal determines the two degree of actuations, and what the relationships between the accelerator pedal, two degree of actuations and different spring constants. See specification's abstract, page 1, lines 23-25; page 2, lines 20-23; page 2, line 25 – page 3, line 8).

Claims **5-7** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The term "via actuation," "via an automatic reset," and "virtual jump-shaped reduction" in claims **5**, **6**, and **7** respectively are a relative terms, which renders the claim indefinite. The term "via actuation," "via an automatic reset," and "virtual jump-shaped reduction" are not defined by the claims **5**, **6**, and **7**, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention. Applicant should clearly disclose the role and operation of the "via actuation," "via an automatic reset," and "virtual jump-shaped reduction" with respect to each others. See specification's page 3, line 29 - page 4, line 16).

Claim **2** is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim **2** recites the limitation "the slope of said time-dependant course" in page 11, line 9. There is insufficient antecedent basis for this limitation in the claim. Claims **1** does not provide explicit antecedent basis for the above term.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims **1** and **8-10** are rejected under 35 U.S.C. 102(b) as being unpatentable over **Kato et al. (Pub. No.: US 2003/0019278 A1)**.

**This rejection is presented in the best understanding of the claim
limitations and in light of the specification**

Regarding **claim 1**, Kato discloses an accelerator pedal apparatus and method for adjusting accelerator pedal apparatus. The methods comprising the steps of:

- Realizing various output value corresponding to the fully closed, opened, and kick-down positions of the accelerator pedal (2) (various operator-controlled functions) in dependence upon different resilient engaging member (3) constants (the degree of actuation) as different type of forces are applied to the accelerator pedal (2) (operator controlled element) (see page1, par. 5 & 7; page 3, par. 35-36; page 4, par. 44; Figures 1A-1C).
- Actuating accelerator pedal (2) against the resilient engaging member (3) force (spring force) with two degree of resilient engaging member being characterized by two different resilient engaging member constants (spring constants) as it is depicted in Figure 1A and 1D respectively. The spring constant value varies as the applied force on the accelerator pedal (2) changes (see page 3, par. 36; Figures 1A-1D).

- Detecting at least one of the fully closed, opened, or kick-down position of the accelerator pedal (2) (various operator-controlled functions) in dependence upon resilient engaging member constant assigned to the instantaneous degree of resilient engaging member. Figure 1D depicts stop vicinity position for the accelerator pedal (2) (see page1, par. 5 & 7; page 3, par. 35-36; page 4, par. 44; Figures 1A-1C).

Regarding **claim 8** refers to **claim 1**.

Regarding **claim 9**, Kato teaches a method for detecting at least one of the fully closed, opened, or kick-down position of the accelerator pedal (2) (various operator-controlled functions) in dependence upon resilient engaging member constant assigned to the instantaneous degree of resilient engaging member. In addition, Kato discloses a method for detecting the kick-down position of the accelerator pedal (2) (at least one operator-controlled function) when its signal is detected several times within the kick-down position region (see page1, par. 5 & 7; page 3, par. 35-36; page 4, par. 44; Figures 1A-1C & 2).

Regarding **claim 10** refers to **claim 1**.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims **2-7** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Kato et al. (Pub. No.: US 2003/0019278 A1) in view of Kuretake (Patent No.: US 6,293,249 B1)**.

This rejection is presented in the best understanding of the claim limitations and in light of the specification

Regarding **claims 2-3**, Kato discloses a method comprising the steps of:

- Detecting a continuous operational angular position of the accelerator pedal (2) (degree of the actuator) by utilizing a pedal position measuring means (13) (see page 5, par. 47-48; Figures 2-3).
- Causing the pedal position measuring means (13) to generate a measurement signal in dependence upon a continuous operation angular position of the accelerator pedal (2) (see page 5, par. 47-48; Figures 2-3).

However, Kato's invention fails to disclose a method comprising the steps of determining a time-dependent course of said measurement signal; and,

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detecting at least one of said operator-controlled functions in dependence upon the slope of said time-dependent course of said measurement signal.

However, Kuretake teaches a unit for controlling electronically controlled throttle value comprising the step of determining the time dependant course of an amount of depression of acceleration pedal (see col. 6, lines 11-15; col. 7, lines 1-5; Figure 3A).

As Kato teaches a method for calculating and depicting the pedal pressing force and sensor output value in accordance to the pedal position (see page 5, par. 47-48; Figure 2), and Kuretake teaches a method for calculating and depicting the time dependant course of an amount of depression of acceleration pedal (see col. 6, lines 11-15; col. 7, lines 1-5; Figure 3A), it would have been obvious to one of ordinary skill in the art at the time was made to convert the pedal position values into a time reference scale as it is implemented in Kuretake's reference by simply calculating how fast the accelerator pedal takes to move from one point to another or how fast its rotational angle change.

Doing so would enhance an accelerator pedal apparatus capable to electronically control a throttle valve.

Furthermore, Kato, in view of Kuretake, teaches a method for detecting a various output values corresponding to the fully closed, opened, and kick-down positions of the accelerator pedal (2) (various operator-controlled functions) in dependence upon a slope of time-dependant, which can be calculated from the accelerator pedal position, of the continuous operational angular position of the accelerator pedal (2) (see page 5, par. 47-48; Figures 2-3).

In addition, Kato, in view of Kuretake, teaches a method for detecting at least one of the various output value corresponding to the fully closed, opened, and kick-down positions of the accelerator pedal (2) (various operator-controlled functions) when the slope of the time-dependent course of the continuous operational angular position of the accelerator pedal (2) lies within the fully open position and kick-down position range of the continuous operational angular position of the accelerator pedal (2) (pre-given region) (see Figure 2).

Regarding **claim 4**, Kato teaches a fully open - kick-down position region to be defined by a measured and correction values (threshold values) (see page 6, par. 49; Figure 4).

Regarding **claim 5-7**, Kato, in view of Kuretake, teaches a method for selecting a fully open - kick-down position region to be defined by a measured and correction values so that the pedal position signal, which can be converted into a time-dependant scale, changes not only via its angle of rotation (via actuation), but also via the resilient engaging member constant (via an automatic reset / virtually jump-shaped reduction) of the accelerator pedal. The spring constant value of the resilient engaging member varies as the applied force on the accelerator pedal (2) changes (see (see page1, par. 5 & 7; page 3, par. 35-36; page 4, par. 44; page 6, par. 49; Figures 1A-1C & 24).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jorge O. Peche whose telephone number is (571)270-1339. The examiner can normally be reached on 8:30 am - 5:30 pm Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Khoi H. Tran can be reached on 571-272-6919. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Jorge O Peche/
Examiner, Art Unit 3664
March 23, 2008
/Khoi H Tran/
Supervisory Patent Examiner, Art Unit 3664